Regulation for the use of Digital Media at the International German School HCMC (IGS)

Foreword

A core task of schools is to ensure social connectivity and participation. The use of digital media has long been a prerequisite for connection and participation. Mobile apps, online portals, learning management systems, Skype conferences, these structure our everyday lives. Media literacy is one of the basic skills for social success. Like all environmental stimuli, the influence of digital media shapes cognitive concepts and learning behavior. The use of digital media changes people's habits: virtual peers and online apps compete with real people, real breaks, hiking through the forest or playing in the sandpit. School and parents act as mediators of media skills. At the same time, it is increasingly becoming the task of school and parental home to absorb the consequences of the changing realities of life. Due to the enormous speed of advancing digitization, a test phase before implementation in school is hardly possible. Learning processes, conversions and adaptations take place to a certain extent as if on a *moving train*.

This concept for the use of digital media and the development of the Information and Communication Technologies (ICT) learning area describes the framework conditions, objectives and content as well as methodological considerations for teaching and learning with digital media at the International German School HCMC (IGS) .

The IGS is in the process of digitization. In addition to aspects of the equipment, this relates primarily to the following areas:

- teaching and learning processes / i.a. hybrid classroom
- school communication
- marketing
- administration
- quality management and documentation

I.   Infrastructure and equipment

a) Hardware infrastructure

Server, networking, firewall / security
(see internal regulations)

Notebooks, iPads

Mobile devices enable working and learning activities on campus which transcend time and location. Learners can use their own ICT devices (notebooks, tablets, smartphones, etc.) in class. The physical use is regulated by the teachers and must be didactically justifiable.

In addition to their own end devices (see BYOD), school-owned notebooks and iOS devices (iPads) are available for teaching or individual learning at primary and secondary level as well as for the work of the employees.

In the U6 section, tablets are only occasionally used, e.g. the Seesaw app. At the other school levels, tablets are used in addition to laptops. The school's own devices are equipped with the Windows / Microsoft operating system and standard selected software or learning apps. Configuration and daily maintenance / security settings are made by the IT Department.

When choosing peripheral devices, care is taken to ensure that they meet the requirements for working with children and adolescents. Apple TVs and portable projectors are available for all classes across the board. Additional peripheral devices are available in an in-house pool. (printers, scanners, microphones, document readers etc.)

Laptops and iPads can be borrowed daily by learners and teachers against a signature in the IT Department. Regulations in this regard are described in the school regulations (3.2 Loan of teaching and learning materials):

Notebooks, iPads and IT accessories can be borrowed during the school day, but all devices belonging to the IT Department must be returned by 4:30 p.m. Borrowing after this time is only possible with the signature of the respective divisional manager for each individual case. Before borrowing, the devices are checked for integrity. The loss of school-owned equipment or accessories must be reported immediately; damage must be reported to the IT Department before delivery no later than 4:30 p.m. on the same day. Damage to devices or accessories will be charged to those who caused them, or to custodians. If staff or students have not treated IT equipment with the proper care or have left these unattended, they will be banned from borrowing for the rest of the school year and can only work with private devices during this period (Appendix 1 BYOD).

Classroom

The technical equipment of the classrooms varies. As a rule, projection options such as AppleTVs, smartboards or document cameras are available in every classroom. If this is not the case, mobile projectors can be reserved in the IT office. In addition, all classrooms have access to the school via WLAN. Distribution sockets should be available to the students for charging the devices.

b) Software

The use of apps is considered justified if the use of learning processes is promoted or made more efficient without undermining the partial learning performance. It should also facilitate work processes and support the achievement of learning goals. Didactic added value is seen in particular with regard to the following aspects:

- differentiated work
- learning status diagnosis and learning at individual pace, interests and needs
- motivation, among others due to a strong relevance to current issues as well as the possibility to quickly capture opinions
- the illustration of complex facts
- Presentation of learning outcomes and opening of the school
- student-oriented work
- efficient use of class time

The IGS endeavors to use the school's own equipment as functionally and uniformly as possible and to operate software equipment to provide users with a better overview and to reduce training requirements. Procurement is carried out according to the usual procedure with the involvement of the IT Department. The license acquisition for the use of apps is applied for through the EdTech Coach. (iPad App Request Form). Newly acquired apps are presented to the college. A method for evaluating software applications in the classroom has yet to be developed.

The IGS also maintains a list of recommendations for the use of learning software / apps.
For parents, learners and teachers, these are accessible on the homepage.

The software used at the school can be divided into three areas:

1. Operating system and utilities

Windows and iOS operating systems, system extensions and drivers, virus protection, support software, popular additional software (PDF reader, etc.) are used.

2. Standard programs

Browser, photo editing software, audio software, drawing / painting program, video editing software etc.

3. Educational software / teaching-specific educational software

Learning software includes electronic teaching aids (mBook history, bilingual textbook BiBox) and programs for teaching aids, level and subject-specific learning software (e.g. learning workshop for elementary school, language learning applications such as Quizlet, Linguascope, Antolin program to promote reading, etc.).

The effective software configuration is level- and device-specific. Detailed documentation is listed in the appendix.

c) Networking internally and with the Internet

The school network benefits from protection against the Internet (firewall) and a professionally managed web content filter. The web content filter serves to protect children and young people, and is intended to prevent the opening of racist, violence-glorifying and pornographic websites.

The internal networking takes place exclusively via radio network technology (WLAN). Each floor is equipped with WLAN so that the mobile devices can easily access the network.

Only the IT Department has access to the server infrastructure for storing data. The offers of external service providers on the Internet (e.g. Google Drive) are used for the storage and exchange of

information and files between employees. There are three password-protected networks to ensure a fast internet connection for lessons:

- network for teachers
- network for students and one
- open campus network with guest access.

The in-house file server contains the entire server infrastructure (authorization server, file server, administration) and is located together with the rack in a secure room.

d) School management system - aSc Edupage

The IGS uses the web-based software aSc Edupage, which is used as a multifunctional tool:

- planning and publication of the timetable (admin)
- planning and publication of the substitution plan (admin)
- management of the electronic class and grade book with attendance function
- certificate programme
- examination scheduling

The use of the accounting program requires an update from aScEdupage. An offline version is used to create the timetable.

e) Google Suite for Education

The IGS uses the free Google for Education service, which offers independently configurable variants of Google applications. (see organizational development)

f) Publication Media
Website / IGS_TV

The IGS maintains a public website (https://igs-hcmc.org) on which it presents general information and news. The school management and marketing department act as webmasters. The system used has a differentiated rights management so that separate areas can be generated.

Facebook / Youtube

The school's Facebook / YouTube pages are part of the marketing strategy implemented by the school. Impressions of everyday school life, special activities and events are published here. The school management in consultation with the marketing department is an authorized author.

Newsletter

The newsletter "Die Schule - Parent Edition" is published weekly with information about events on campus. In addition, the IGS publishes a monthly newsletter "The School - Community Edition." Both newsletters appear in German and English and are automatically sent via Mailchimp. The address files are updated via the school office. Subscription is possible via the homepage.

A weekly DaF / DaZ newsletter with tasks and material for language promotion is published during school time in order to promote continuous language contact in the DaF entry program and for learners with German as a second language. A report is also published weekly in the groups in the U6 area.

Yearbook

A school yearbook appears as a review for learners, parents and teachers.

Web presence

The IT Department in cooperation with the Marketing Department maintains a list of those sites on which the IGS is present.

II. Infrastructure and equipment

Media education / ICT is an independent teaching subject at IGS, which is taught from grade 3 onwards. The basis for acquiring the competencies required for dealing responsibly with media and ICT is taught in the school's internal ICT curriculum, which was adopted in the 2018/19 school year.

Curricular Framework

The aim of the ICT lessons is to provide a comprehensive media education based on an internal school curriculum. Learners should acquire the ability to use the media sensibly and responsibly, but also critically and competently question their interdependencies. They should be able to produce their own media articles and recognize media effects.

Other subjects

In addition to the subject ICT, digital media can and should be integrated efficiently and didactically in all teaching subjects into the thematic teaching context where there is a pedagogical added value. It is explicitly not about digitizing all educational processes as an end in itself. We assume that in addition to promoting application competence, it is also necessary to compensate for the consequences of digitization and to promote concentration and the understanding of complex contexts. Aspects of data protection, personal rights and the positioning of identity against the background of a virtual experience always play a central role (learning via media).

The IGS ensures that learners use media and ICT in a variety of ways as a learning tool in the following areas:

- designing (e.g. texts, pictures, videos, presentations)
- learning and practising (e.g. with the help of learning software: arithmetic / language training, tutorials)
- finding information / research
- communicating / participating (Web 2.0) (e.g. email traffic in the context of the school, comment functions in the Google Classroom)
- presenting information or ideas (e.g. presentations, interactive maps)
- the organization of learning (e.g. work orders in Google Classroom)
- granting access to school information, grades, timetables and substitution plans (Edupage)

Support and advice concept

Technical support and educational ICT advice are currently complementary areas at IGS. Technical support tasks are largely taken over by external specialist support. An EdTech coach is available to provide advice on methodological and didactic questions.

IT Responsibilities

Technical in-house support is provided by an external company. The professional support staff is responsible for the procurement of ICT funds, for problem solving, the periodic maintenance of hardware and software, and the optimization of the technical requirements in consultation with the school management.

Educational ICT advice: EdTech Coach

The IGS has set up an educational advisory and support service for teachers. In each school unit, an EdTech coach is commissioned to provide support for the teachers in planning and carrying out lessons which require the use of ICT. This includes information about technical innovations.

The EdTech Coach inspires and actively participates in the development of a shared vision and its comprehensive implementation to promote excellence and transformative digital change in the classroom environment.

III. Organizational development

For internal communication, documentation and learning processes, the possibilities of the ICT are used bindingly and developed further.

Communication via Google Mail

All people working at the IGS receive a personal email address. Gmail is used as the mail provider with the server igs-hcmc.org for IGS employees (management, administration, teaching staff etc.). Beginning with the first class, learners will receive an email address that follows the scheme firstname.lastname@student.igs-hcmc.org. The administration of the user accounts is the responsibility of the IT manager.

The school's e-mail addresses are used only for official communication within and outside the school community. The employees pay attention to positive, reliable and target group-specific communication, taking into account the requirements of data protection and corporate design. Certificates, registration documents, certificates, exemptions, etc. are to be deposited in the student files.

Internal file storage Google Drive

The IGS uses the Google Drive file hosting service to store documents and easily share files. The office software package includes Google Docs, Sheets, Slides and Forms, among other things, for the individual and shared editing of documents and tables, presentations, graphics, forms and more.

The internet-based service makes it possible for students and staff to access their own files on any device with an internet connection. This works across all locations and also at home. The provider guarantees data protection and data security.

Various team drives serve as an exchange platform for digital documents. These clearly structured folder systems with search function are used for school organization. There, all teachers have access to the latest document versions regardless of time and place. This creates an archive of all available documents. The following, among other things, can be found there:

- school program and annual planning
- school curriculum, method curriculum, interdisciplinary topics, assessment matrices
- rules and regulations
- minutes (meetings, talks)
- event management (sports day, project week (planning, schedule, letters to parents))
- excursion planning
- school forms (e.g. application forms)
- checklists
- welcome lounge for new teachers

Teachers can exchange existing materials on Team Drive. These include, for example:

- planning documents and materials for self-developed teaching sequences
- worksheets on specific topics
- digitized additional materials for teaching aids
- links to practical internet offers

In addition, working groups (e.g. quality management) at IGS use their own, restricted team drives. Administrator rights are assigned by the school management. Administrators are responsible for maintenance (deletion, updating, etc.)

Google Calendar

Internal team calendars are accessible for employees based on user groups. The following information is listed here:

- events (concerts, celebrations, certificates etc.)
- school trips and excursions
- exams
- new admissions of children

- arrival of new teachers / educators
- advanced training
- cross-class lesson information
- business trips
- visits
- meetings
- i-pad lending

Google Forms Surveys

Google Forms is used to collect data, e.g. for surveying school satisfaction, quality of school meals, weekly catering queries and teaching quality.

The IGS has adopted a training concept in which basic media technology, didactic, and pedagogical skills are anchored. This includes online training as well as face-to-face courses and advice options.

Google Classroom

Google Classroom is an internet platform that enables learning and practice tasks to be digitally created and shared with learners: the pupils work on the tasks on the computer, can communicate electronically with the teacher in the event of any problems or queries, and submit them electronically after completion. Google Classroom is therefore an instrument of integrated learning and is already used in the following areas:

- homework, e.g. educational videos
- online exercises
- storage of lesson content
- level assessment, online tests
- calendar integration: announcement of class assignments, e.g.
- differentiation
- surveys

Role of Parents

The school cannot deal with the dangers and problems inherent in media and ICT use alone. Parents play a central role in issues such as exposure to racism, the glorification of war, access to pornography and preventing addiction to computer games and social media. Together with the ICT adviser, the parents' representative and external experts, the IGS therefore offers further training courses on relevant topics.

Quality Management

Aspects of digitalization have a decisive impact on quality development. They are part of the action plan which is a part of the school's quality management plan. The achievement of quality targets in this area is evaluated annually on the basis of indicators, and new targets are formulated.

IV.   System security and data protection

The following precautions are taken to ensure the security of infrastructure and the protection of general and personal data:

- Infrastructure is assembled or placed in such a way that it cannot be easily removed. Tools are stowed in the lockable IT room when not in use. Both are therefore protected against operational failures (power failure, flooding).

- Only authorized persons have access to the ICT resources (devices, network, etc.).

- Networks and data are protected against the influence of malware or against intrusion from outside and against defective behavior from inside by means of information technology (anti-virus protection, firewall etc.).

- In the primary school, age-adequate search engines are used. (cf. EdTech coach)

- The personal data and data of the learners (including finance) are protected against unauthorized access, manipulation or loss. Backups are created periodically. Access rights regarding the registration and deregistration of persons (learners, children, parents, employees) are only given at the school office. In addition, there is no unprotected exchange of person-sensitive data via unprotected channels.

- Administrator and access rights (grades, timetable rights, website, Facebook, Google Suite) are clearly regulated.

- Passwords are for internal use only and may not be passed on to third parties.

- The usage agreements for employees and for schoolchildren regulate which activities, including the school infrastructure, are permitted and desired, and which are prohibited.
- When using digital aids in the classroom, data security measures are taken (access rights and options).

- Image rights and publications: The school only publishes data from learners, of whom a written declaration of consent from the parents is available. This is given by the declaration

upon registration or the school contract. Employees are not permitted to use learners' data for private purposes or to publish them without the approval of the school management. Unauthorized persons (e.g. parents) are prohibited from taking photos, video or audio recordings within the school or on schooltrips. Public events are excluded. The archiving period of documents depends on specific legal requirements.

- The data protection declaration can be updated with the approval of the school management if data flows are changed, when applications access personal data, or when other institutions carry out data collections.

- For applications / conference platforms *et al*, the most current versions are used; security requirements (e.g. zoom / waiting room, passwords) are taken into account.

V.   Parental Work

Parent consultation days and individual parenting meetings can be planned with the Calendly web tool and carried out with the Zoom communication platform. (e.g. also as an alternative during the Covid prevention measures) EdTech coaches are available to support the staff.

VI.   Vision

Media education is part of a holistic education.

The school pays attention to the resource-saving use of ICT funds, looks for synergies and simplifies processes. Regulations are examined at reasonable intervals for their efficiency and, if necessary, revised or abandoned.

In the advancing the digitization process, the following innovations are planned at IGS in the future:

- use of other functions of
- opening aScEduPage for students and parents to provide access to curricula, homework, grades etc.
- cafeteria plan and evaluation
- development of makerspace
- virtual experiments
- use of learning software to promote writing techniques
- introduction of further interactive textbooks
- use of a learning platform for language courses

- procedure for the introduction, testing and evaluation of new (learning) software
- continuing education concept for ICT and media (pupils, parents, teachers)
- automated recording of ICT infrastructure, management of access rights
- annual ICT curriculum update
- concept for a hybrid classroom
- professional management of software, passwords, emails, licenses or similar

Appendix 1: Bring Your Own Device Policy (BYOD)

Learners

Notebooks and tablets are the fountain pens of the 21st century and a bring-your-own-device policy from grade 5 is being implemented at IGS, which regulates the use of private, network-compatible devices. For secondary school learners (5-12), it is assumed that they bring a fully loaded notebook to the required teaching units that meets the minimum requirements of the BYOD policy. In grades 1-4, mobile devices can be borrowed from the device pool on an hourly basis at the known conditions. For grades 3-4, the use of a private tablet is recommended. All learners who use mobile devices on the school premises must follow the set regulations for their use.

The learners are only allowed to use the devices for school purposes with the explicit permission of the teacher. If mobile phones, tablets or laptops are used outside the specified parameters, the teacher will confiscate the devices for the rest of the day. The use of electronic devices for grades 1-9 is not permitted during break times.

Notebook specifics (for Windows or MacOS)

- a screen size of 10 inches or more
- a battery charge that is sufficient for an entire school day
- processor for text, media and data processing and internet research
- wifi enabled software
- word processing: e.g. Word, Pages, Google Docs
- presentations: e.g. PowerPoint, Keynote, Prezi, Google Slides
- video editing: e.g. iMovie, Final Cut Pro, WeVideo
- image processing: e.g. Photoshop, Lightroom, Gimp, Pixlr
- sound editing: e.g. GarageBand, Audacity, Sound Trap

The pupils have to ensure that the fully charged notebook / tablet is brought to the required teaching units. In exceptional cases, pupils can request a laptop from the school equipment pool. It should be borne in mind that school laptops are issued on a first-come-first-served basis.

The school is not liable for loss or damage to hardware or software. The users are responsible for the careful use and safety of the devices.

Teachers

The school allows teachers the use of private devices. The regulations on data protection must be observed. A limited number of laptops and / or iPads can be borrowed for business purposes.